

### **c.) Amendments to the Claims**

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1. (Currently amended) In an electronic device that accepts hand drawn entries, a method for recognizing the hand drawn entries, comprising the steps of:

receiving each hand drawn entry as a plurality of sequential points;

performing at least one of the following steps in any order:

measuring the size of the hand drawn entry and comparing the size of the hand drawn entry to a size range;

determining the existence and number and angles of vertices in a line which could be drawn between said points;

performing a Wide Pen Test;

comparing the results of said at least one step to a set of rules, a favorable comparison leading to conclusive identification of the hand drawn entry as an identified shape.

2. (original) The method for recognizing hand drawn entries of claim 1, wherein said at least one step includes determining the distance between said vertices.

3. Canceled

4. (original) The method for recognizing hand drawn entries of claim 1, wherein said at least one step includes performing a test for Golden Clues.

5. (original) The method for recognizing hand drawn entries of claim 1, wherein said at least one step includes the step of excluding identification of shapes that do not conform to said set of rules.

6. (original) The method for recognizing hand drawn entries of claim 1, wherein said at least one step includes excluding identification of shapes that do not conform to said set of rules regarding size.

a 7. (original) The method for recognizing hand drawn entries of claim 1, further including a plurality of hand drawn entries, each of said hand drawn entries being analyzed individually.

8. (original) The method for recognizing hand drawn entries of claim 1, further including a plurality of hand drawn entries, said lines being agglomerated and analyzed as a single entity.

9. (currently amended) In an electronic device that accepts hand drawn entries, a method for recognizing the hand drawn entries, comprising the steps of:  
receiving each hand drawn entry as a plurality of sequential points;  
performing at least one of the following steps in any order:  
measuring the size of the hand drawn entry and comparing the  
size of the hand drawn entry to a size range;

determining the existence and number and angles of vertices in a line which could be drawn between said points;

comparing the results of said at least one step to a set of rules, a favorable comparison leading to conclusive identification of the hand drawn entry as an identified shape ~~The method for recognizing hand drawn entries of claim 1,~~

further including a plurality of hand drawn entries of different colors, said set of rules including color rules to determine agglomeration of said entries as a single entity.

10. (currently amended) In an electronic device that accepts hand drawn entries, a method for recognizing the hand drawn entries, comprising the steps of:

receiving each hand drawn entry as a plurality of sequential points;

performing at least one of the following steps in any order:

measuring the size of the hand drawn entry and comparing the size of the hand drawn entry to a size range;

determining the existence and number and angles of vertices in a line which could be drawn between said points;

comparing the results of said at least one step to a set of rules, a favorable comparison leading to conclusive identification of the hand drawn entry as an identified shape ~~The method for recognizing hand drawn entries of claim 1,~~

further including the step of using arrow logics to establish attributes of said identified shape.

11. (currently amended) In an electronic device that accepts hand drawn entries, a method for recognizing the hand drawn entries, comprising the steps of:  
receiving each hand drawn entry as a plurality of sequential points;  
performing at least one of the following steps in any order:  
measuring the size of the hand drawn entry and comparing the  
size of the hand drawn entry to a size range;  
determining the existence and number and angles of vertices in a line which  
could be drawn between said points;  
comparing the results of said at least one step to a set of rules, a favorable  
comparison leading to conclusive identification of the hand drawn entry as an  
identified shape ~~The method for recognizing hand drawn entries of claim 1,~~  
further including the step of creating an info window for at least one of said  
identified shapes, said info window enabling setting and altering attributes for said  
at least one identified shape.

12. (original) The method for recognizing hand drawn entries of claim 1,  
further including the step of carrying out further analytic tests to determine the  
specific object type.

13. (original) The method for recognizing hand drawn entries of claim 1,  
wherein said at least one step includes determining the angular trend of said  
plurality of sequential points.

14. (original) The method for recognizing hand drawn entries of claim 13, further including the step of excluding identification of shapes that do not conform to said set of rules regarding angular trend.

15. (currently amended) In an electronic device that accepts hand drawn entries, a method for recognizing the hand drawn entries, comprising the steps of:

receiving each hand drawn entry as a plurality of sequential points;

performing at least one of the following steps in any order:

measuring the size of the hand drawn entry and comparing the size of the hand drawn entry to a size range;

determining the existence and number and angles of vertices in a line which could be drawn between said points;

comparing the results of said at least one step to a set of rules, a favorable comparison leading to conclusive identification of the hand drawn entry as an identified shape ~~The method for recognizing hand drawn entries of claim 1,~~ wherein said step of measuring the size includes the step of generating a minimum bounding rectangle to circumscribe the hand drawn entry.

16. (original) The method for recognizing hand drawn entries of claim 15, further including the step of determining the size of said bounding rectangle, and comparing said size to size rules for at least one identifiable shape.

17. (currently amended) The method for recognizing hand drawn entries of claim 3 1, wherein said wide pen test includes the step of generating a minimum bounding rectangle to circumscribe the hand drawn entry.

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18. (original) The method for recognizing hand drawn entries of claim 17, further including the step of generating at least one identifiable geometric shape inscribed in said bounding rectangle, and comparing the coincidence of said points of said hand drawn entry with a wide pen stroke defining at least one identifiable geometric shape.

19. (original) The method for recognizing hand drawn entries of claim 18, wherein said wide pen stroke is selected to be a predetermined width, and further including the step of adaptively altering said predetermined wide pen stroke width.

20. (original) The method for recognizing hand drawn entries of claim 19, wherein the identifiable geometric shape yielding a degree of coincidence greater than a predetermined coincidence threshold is determined to be the shape of said hand drawn entry.

21. (original) The method for recognizing hand drawn entries of claim 20, further including the step of adaptively altering said coincidence threshold.

22. (original) The method for recognizing hand drawn entries of claim 20, further including the step of determining the angular trend of said hand drawn entry.

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23. (original) The method for programming an electronic device of claim 11, including the step of drawing at least one arrow from an attribute shown in an info window to at least one identified shape outside said info window.

24. (original) The method for recognizing hand drawn entries of claim 1, further including the step of determining the angular orientation of said hand drawn entry with respect to a reference orientation.

25. (original) The method for recognizing hand drawn entries of claim 24, further including the step of excluding identification of shapes that do not conform to said set of rules regarding angular orientation.

26. (currently amended) The method for recognizing hand drawn entries of claim 1, further including the step of determining the proximity of said hand drawn entry to another graphic object , and thereafter excluding identification of shapes that do not conform to said set of rules regarding maximum proximate distance to said another graphic object.

27. canceled.

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29. (currently amended) In an electronic device that accepts hand drawn entries, a method for recognizing the hand drawn entries, comprising the steps of:  
receiving each hand drawn entry as a plurality of sequential points;  
performing at least one of the following steps in any order:  
measuring the size of the hand drawn entry and comparing the  
size of the hand drawn entry to a size range;  
determining the existence and number and angles of vertices in a line which  
could be drawn between said points;  
comparing the results of said at least one step to a set of rules, a favorable  
comparison leading to conclusive identification of the hand drawn entry as an  
identified shape ~~The method for recognizing hand drawn entries of claim 1,~~  
further including the step of identifying a portion of said hand drawn entry  
drawn more slowly than other portions of said hand drawn entry.

30. (original) The method for recognizing hand drawn entries of claim 29,  
further including the step of determining the existence of a vertex in said portion  
of said hand drawn entry, and calculating the vertex angle.

31. (original) The method for recognizing hand drawn entries of claim 29,  
wherein said portion of said hand drawn entry is identified by storing and  
analyzing time of entry data of said plurality of points.



32. (currently amended) The method for recognizing hand drawn entries of claim 30, wherein if a vertex angle in said portion of said hand drawn entry is substantially orthogonal, ~~said~~ a golden clue test provides increased potential for identifying a rectilinear shape.

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33. (currently amended) The method for recognizing hand drawn entries of claim 30, wherein if a vertex angle in said portion of said hand drawn entry is substantially non-orthogonal, ~~said~~ a golden clue test provides increased potential for exclusion of all rectilinear shapes.

34. (currently amended) The method for recognizing hand drawn entries of claim 30, wherein if a pair of vertex angles in said portion of said hand drawn entry are substantially orthogonal, proximate, and opposite, ~~said~~ a golden clue test provides increased potential for identification of a folder shape.

35. (currently amended) The method for recognizing hand drawn entries of claim 30, ~~wherein said~~ further including a golden clue test ~~includes for~~ identifying a first-drawn portion of said hand drawn entry, determining the existence of a vertex in said first drawn portion of said hand drawn entry, and calculating the vertex angle.

36. (original) The method for recognizing hand drawn entries of claim 35, wherein if a vertex angle in said first-drawn portion of said hand drawn entry is

substantially orthogonal, said golden clue test provides increased potential for identification of rectilinear shapes.

37. (original) The method for recognizing hand drawn entries of claim 35, wherein if a vertex angle in said first-drawn portion of said hand drawn entry is substantially non-orthogonal, said golden clue test provides increased potential for exclusion of all rectilinear shapes.

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38. (currently amended) In an electronic device that accepts hand drawn entries, a method for recognizing the hand drawn entries, comprising the steps of:

receiving each hand drawn entry as a plurality of sequential points;

~~The method for recognizing hand drawn entries of claim 1, further including~~

a slice step of identifying three of said points that are adjacent and spaced apart greater than a minimum pixel length distance, constructing an angle defined by said three points, measuring the constructed angle, and reiterating said slice step in serial fashion with consecutive points of said hand drawn entry to include ~~substantially~~ all said points of said hand drawn entry.

39. (original) The method for recognizing hand drawn entries of claim 38, further including the step of storing the angle measurement of a slice when it exceeds a predetermined angle threshold.

40. (original) The method for recognizing hand drawn entries of claim 39, further including the step of reducing said predetermined angle threshold whenever said reiterated slice step yields an angular measurement less than said predetermined angle threshold.

a1 41. (original) The method for recognizing hand drawn entries of claim 39, wherein if an angle measurement of a given slice step exceeds said predetermined angle threshold, and the angle measurement of the subsequent slice step is less than said predetermined angle threshold, a vertex is identified in the portion of said hand drawn entry containing said given slice step.

42. (original) The method for recognizing hand drawn entries of claim 1, wherein said at least one step includes detecting and storing the first pen down location of said hand drawn entry.

43. (original) The method for recognizing hand drawn entries of claim 1, wherein said at least one step includes detecting and storing the direction of the pen stroke of said hand drawn entry.

44. (original) The method for recognizing hand drawn entries of claim 1, wherein said at least one step includes measuring the speed of drawing said hand drawn entry.

45. (original) The method for recognizing hand drawn entries of claim 44, wherein said speed of drawing is determined by detecting the point-to-point spacing between said sequential points of said hand drawn entry, the point-to-point spacing varying directly with said speed of drawing.

a<sup>1</sup> 46. (original) The method for recognizing hand drawn entries of claim 44, wherein said speed of drawing is determined by recording the time of entry of each of said sequential points, and calculating the speed of drawing from said time of entry data.

47. canceled

48. (original) The method for recognizing hand drawn entries of claim 1, wherein said results of said at least one step include numerical parameters that correspond to characteristics of said hand drawn entry, said numerical parameters being compared to stored magic number values.

49. (original) The method for recognizing hand drawn entries of claim 48, wherein said magic number values are selectively varied in response to inconclusive comparisons to said set of rules.

50. (original) The method for recognizing hand drawn entries of claim 49, wherein said magic number values can be selectively varied by user input.

Claims 51-94. Withdrawn

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95. (original) The method for programming an electronic device of claim 11, including the step of drawing at least one arrow to an attribute shown in an info window from at least one identified shape outside said info window.

96. (original) The method for recognizing hand drawn entries of claim 40, wherein the maximum total reduction of said predetermined angle threshold is determined by a user-defined parameter.

Claims 97-103. Withdrawn

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